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EXAMINER	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/645,566	JEON ET AL.	
	Examiner	Art Unit	
	Nathan Danielsen	2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 March 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4,7-10,12-19,22-25 and 35-61* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4,7-10,12-19,22-25 and 35-61* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *05/04/09*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-4, 7-10, 12-19, 22-25, and 35-61 are pending. Claims 26-34 have been canceled in Applicant's preliminary amendment filed 03 December 2004. Claims 6 and 11 have been canceled in applicant's amendment filed 09 May 2007. Claim 20 has been canceled and claims 50-61 have been added in applicant's amendment filed 18 October 2007. Claims 5 and 21 have been canceled in applicant's amendment filed 07 October 2008.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 19 March 2009 has been entered.

Priority

3. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Objections

4. Claims 1, 18, 38, 50, and 56 are objected to because the limitations "each of the data units" and "each of said data units" should be changed to --each of the one or more data units-- and --each of the one or more data units--, respectively. Appropriate correction is required.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1-4, 8, 13, 16, 19, 24, 25, 36-41, 46-51, 53, 56, 57, and 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shim (US Patent Application Publication 2002/0085466), in view of Senshu (US Patent Application Publication 2002/0060968), and further in view of Nagai et al (US Patent 6,938,162 hereinafter Nagai).

Regarding claims 1, 3, 18, and 38, Shim discloses a high-density recording medium (and associated methods of recording or reproducing) including one or more recording layers (¶ 13), the recording medium comprising:

a lead-in area including a disc information required for recording or reproducing data on or from the recording medium (¶ 13; where the discrimination is required for reproducing data from any of the disk types listed in ¶ 13); and

a burst cutting area located at an inner area other than the lead-in area (¶18), the burst cutting area including one or more data units (figure 3; where the BCA of figure 3 includes one data unit);

wherein the disc information is included in each of the data units (¶s 28 and 30 and figure 3, in combination with the preceding explanation) and

the disc information includes at least a medium type information that identifies a type of recording layer in the recording medium (I_{DDT} in ¶s 28 and 30 and figure 3) and

wherein each said data unit includes data of 4 rows and each of the data rows has a sync field of 1 byte and an information field of 4 bytes (I_{DDT} and EDC_{DDT} in figure 3 and ¶s 28 and 33), and

wherein each said data unit includes parity of 4 consecutive rows and each of the parity rows has a sync field of 1 byte and a field of 4 bytes (ECC_{BCA} in figure 3 and ¶s 28 and 33) and

wherein the information field includes the medium type information indicating at least one of the following types: read-only, recordable, and rewritable (¶s 13 and 30; where all the disk types in ¶ 13 have read-only data layers).

However, Shim fails to disclose where the BCA includes more than one data unit, where the disc information is included in each of the more than one data unit, and where identical information is redundantly stored in both the BCA and the lead-in area.

In the same field of endeavor, Senshu discloses where the BCA includes more than one data unit (¶ 55) and where the disc information is included in each of the more than one data unit (¶ 55).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the recording medium of Shim with the data format of Senshu, for the purpose of enabling reliable reproduction of data in a BCA (¶ 10). However, Senshu also fails to explicitly disclose where identical information is redundantly stored in both the BCA and the lead-in area.

In the same field of endeavor, Nagai discloses where identical information is redundantly stored in both the BCA and the lead-in area (col. 24, lines 30-40).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the recording medium of Shim, as modified by Senshu, with the data format of Nagai, for the purpose of ensuring that at least one readable copy of the control information is present on the recording medium after it is manufactured (col. 24, lines 30-40).

Regarding claims 50 and 56, Shim discloses an apparatus for recording or reproducing data on or from a high-density recording medium including one or more recording layers (figure 1 and ¶s 5-7), the apparatus comprising:

an optical pickup (element 102 in figure 1); and

a controller operatively connected to the optical pickup and configured to identify disc information recorded in a burst cutting area and lead-in area of the recording medium (element 116 in figure 1 and ¶ 34),

the information including at least a medium type information that identifies a type of recording layer in the recording medium (¶s 5, 13, and 34) and

control a data recording or reproducing operation, based on the identified information (¶s 7, 13, 34, and 35)

wherein the burst cutting area includes one or more data units (figure 3; where the BCA of figure 3 includes one data unit),

the disc information being included in each of the data units (¶s 28 and 30 and figure 3, in combination with the preceding explanation) and

wherein the apparatus identifies the disc information by processing at least one of the data units (¶ 34) and

wherein each said data unit includes data of 4 rows and each of the data rows has a sync field of 1 byte and an information field of 4 bytes (I_{DDT} and EDC_{DDT} in figure 3 and ¶s 28 and 33), and

wherein each said data unit includes parity of 4 consecutive rows and each of the parity rows has a sync field of 1 byte and a parity field of 4 bytes (ECC_{BCA} in figure 3 and ¶s 28 and 33),

wherein the information field includes the medium type information indicating at least one of the following types: read-only, recordable, and rewritable (¶s 13 and 30; where all the disk types in ¶ 13 have read-only data layers).

However, Shim fails to disclose where the BCA includes more than one data unit, where the disc information is included in each of the more than one data unit, and where identical information is redundantly stored in both the BCA and the lead-in area.

In the same field of endeavor, Senshu discloses where the BCA includes more than one data unit (¶ 55) and where the disc information is included in each of the more than one data unit (¶ 55).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the recording medium of Shim with the data format of Senshu, for the purpose of enabling reliable reproduction of data in a BCA (¶ 10). However, Senshu also fails to explicitly disclose where identical information is redundantly stored in both the BCA and the lead-in area.

In the same field of endeavor, Nagai discloses where identical information is redundantly stored in both the BCA and the lead-in area (col. 24, lines 30-40).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the recording medium of Shim, as modified by Senshu, with the data format of Nagai, for the purpose of ensuring that at least one readable copy of the control information is present on the recording medium after it is manufactured (col. 24, lines 30-40).

Regarding claim 2, Shim, in view of Senshu and Nagai, discloses everything claimed, as applied to claim 1. Additionally, Shim discloses where the medium type information indicates that the recording medium is a writable medium or read-only medium (¶s 13 and 30; where all the disk types in ¶ 13 have read-only data layers).

Regarding claim 4, Shim, in view of Senshu and Nagai, discloses everything claimed, as applied to claim 3. Additionally, Shim discloses where the disc information field is recorded in a first data unit (figure 3; where the data unit of Shim is the first and only data unit of the BCA).

Regarding claims 8, 19, 40, 51, and 57, Shim, in view of Senshu and Nagai, discloses everything claimed, as applied to claims 1, 18, 38, 50, and 56. Additionally, Shim discloses where the disc information further includes layer information (¶ 34, in combination with ¶s 5 and 13; where, for example, a single-layer DVD is a different disk type than is a dual-layer DVD).

Regarding claims 16 and 39, Shim, in view of Senshu and Nagai, discloses everything claimed, as applied to claims 1 and 38. Additionally, Shim discloses where the medium type information is included in at least one information byte (I_{DDT} in figure 3 and ¶s 28 and 30).

Regarding claims 24 and 46, Shim, in view of Senshu and Nagai, discloses everything claimed, as applied to claims 18 and 38. Additionally, Shim discloses where the identifying and reading steps identify/read the information preferentially when the recording medium is loaded in a recording or reproducing apparatus (¶ 34).

Regarding claims 25, 37, 47, and 48, Shim, in view of Senshu and Nagai, discloses everything claimed, as applied to claims 18 and 38. Additionally, Shim discloses where the identifying step identifies

the information in an early stage of recording or reproducing data on or from the recording medium and at an early stage of a drive start-up procedure (¶ 34).

Regarding claims 36 and 49, Shim, in view of Senshu and Nagai, discloses everything claimed, as applied to claims 18 and 38. However, Shim, in view of Senshu, fails to disclose where the control information in said lead-in area includes the disc information in the burst cutting area.

In the same field of endeavor, Nagai discloses where the control information in said lead-in area includes the disc information in the burst cutting area (col. 24, lines 30-40).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the recording medium of Shim, as modified by Senshu, with the data format of Nagai, for the purpose of ensuring that at least one readable copy of the control information is present on the recording medium after it is manufactured (col. 24, lines 30-40).

Regarding claim 41, Shim, in view of Senshu and Nagai, discloses everything claimed, as applied to claim 38. Additionally, Shim discloses processing the read information included in at least one data unit to identify the information (¶ 34).

Regarding claims 53 and 59, Shim, in view of Senshu and Nagai, discloses everything claimed, as applied to claims 52 and 58. However, Shim, in view of Senshu, fails to disclose where the disc information further includes an application indicator to indicate a use for a copy protection system.

In the same field of endeavor, Nagai discloses where the disc information further includes an application indicator to indicate a use for a copy protection system (col. 2, lines 16-29).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the recording medium of Shim, as modified by Senshu, with the data format of Nagai, for the purpose of preventing content from being copied unjustly (col. 2, lines 16-29).

7. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shim, in view of Senshu and Nagai, and further in view of Dieleman et al (US Patent 5,341,356; hereinafter Dieleman).

Regarding claim 7, Shim, in view of Senshu and Nagai, discloses everything claimed, as applied to claim 6. However, Shim, in view of Senshu and Nagai, fails to disclose where the lead-out area contains control information.

In the same field of endeavor, Dieleman discloses where the lead-out area contains control information (abstract).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the apparatus and disk of Shim, as modified by Senshu and Nagai, with those of Dieleman, for the purpose of controlling reading of the information in all of the recorded information volumes (abstract).

8. Claims 9, 12, 35, and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shim, in view of Senshu and Nagai, and further in view of applicant's admitted prior art (hereinafter the AAPA).

Regarding claims 9, 35, and 45, Shim, in view of Senshu and Nagai, discloses everything claimed, as applied to claims 8, 18, and 38. However, Shim, in view of Senshu and Nagai, fails to disclose where the disc information further includes a sequence number to identify a data unit.

In the same field of endeavor, the AAPA discloses where the disc information further includes a sequence number to identify a data unit (3-byte sector number information in page 2, line 4 and figure 2).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the apparatus and disk of Shim, as modified by Senshu and Nagai, with those of the AAPA, for the purpose of identifying the sector which is the currently being recorded/reproduced, thereby making a disk with easier access and control (page 2, lines 2-4).

Regarding claims 12, Shim, in view of Senshu, Nagai, and the AAPA, discloses everything claimed, as applied to claim 9. However, Shim, in view of Senshu, fails to disclose where the disc information further includes an application indicator to indicate a use for a copy protection system.

In the same field of endeavor, Nagai discloses where the disc information further includes an application indicator to indicate a use for a copy protection system (col. 2, lines 16-29).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the recording medium of Shim, as modified by Senshu, with the data format of Nagai, for the purpose of preventing content from being copied unjustly (col. 2, lines 16-29).

9. Claims 10, 52, and 58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shim, in view of Senshu and Nagai, and further in view of Xie (US Patent 7,304,937).

Regarding claims 10, 52, and 58, Shim, in view of Senshu and Nagai, discloses everything claimed, as applied to claims 8, 51, and 57. However, Shim, in view of Senshu and Nagai, fails to disclose where layer information represents the number of layers included in the recording medium.

In the same field of endeavor, Xie discloses where layer information represents the number of layers included in the recording medium (col. 7, line 60 through col. 8, line 13).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the apparatus and disk of Shim, as modified by Senshu and Nagai, with those of Xie, for the purpose of determining the quantity and location of BCAs on an optical disk (col. 7, line 60 through col. 8, line 13).

10. Claims 13, 14, 23, 44, 54, 55, 60, and 61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shim, in view of Senshu and Nagai, and further in view of Haneji (US Patent 5,124,962).

Regarding claims 13, 14, 23, 44, 54, 55, 60, and 61, Shim, in view of Senshu and Nagai, discloses everything claimed, as applied to claims 1, 13, 18, 38, 50, 54, 56, and 60, respectively. However, Shim, in view of Senshu and Nagai, fails to disclose a reflectivity information.

In the same field of endeavor, Haneji discloses where the disc information includes a reflectivity information (col. 2, lines 6-16), the reflectivity information indicating the reflectivity of the recording medium (col. 2, lines 6-16), where the reflectivity information is required for an optical power control or an automatic gain control when a data recording or reproducing operation is carried out (col. 2, lines 6-26).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the apparatus and disk of Shim, as modified by Senshu and Nagai, with those of Haneji, for the purpose of setting drive conditions of an optical disk (col. 2, lines 3-5).

11. Claims 15, 17, 22, and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shim, in view of Senshu and Nagai, and further in view of Vining et al (US Patent 6,377,526; hereinafter Vining).

Regarding claims 15, 22, and 43, Shim, in view of Senshu and Nagai, discloses everything claimed, as applied to claims 1, 18, and 38. However, Shim, in view of Senshu and Nagai, fails to disclose where the medium type information represents the type of a BD-ROM (BD-Read Only memory), a BD-R (BD-Recordable), or BD-RE (BD-Rewritable).

In the same field of endeavor, Vining discloses where one byte is dedicated to identifying the type of disk the control data has been recorded on (col. 5, lines 37-48).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the apparatus and disk of Shim, as modified by Senshu and Nagai, with those of Vining, for the purposes of determining the type of medium in the drive as well as to provide support and expansion capabilities for new types of media (col. 5, lines 37-48).

Regarding claim 17, Shim, in view of Senshu and Nagai, discloses everything claimed, as applied to claim 16. However, Shim, in view of Senshu and Nagai, fails to disclose where the medium type information is included in the first information byte in each data unit.

In the same field of endeavor, Vining discloses a byte for indicating the medium type (figure 4). However, this byte in Vining is not the first byte of the data unit shown in figure 4. Therefore, absent criticality for including medium type information in the first information byte in each data unit, locating this information in this byte is considered to be an arrangement of data. Where certain types of descriptive material, such as arrangements or compilations of facts or data, are stored so as to be read or outputted by a computer without creating any functional interrelationship, either as part of the stored data or as part of the computing processes performed by the computer, then such descriptive material alone does not impart functionality either to the data as so structured, or to the computer. Furthermore, Haneji suggests

that the exact location of this data within the plurality of data units, and thus within the BCA (PEP) area, is irrelevant as long as this data is located somewhere within the data units and is therefore reproduced prior to reproducing data from any other location on the recording medium (col. 1, lines 25-39).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the apparatus and disk of Shim, as modified by Senshu and Nagai, with those of Vining, for the purpose of identifying the type of medium in the drive (col. 5, lines 37-48). Furthermore, absent criticality for including medium type information in the first information byte in each data unit, locating this information in this particular location is considered to be a mere arrangement of data and is thus considered to be an obvious matter of design choice.

12. Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shim, in view of Senshu and Nagai, and further in view of Ueda et al (US Patent Application Publication 2001/0007545; hereinafter Ueda).

Regarding claim 42, Shim, in view of Senshu and Nagai, discloses everything claimed, as applied to claim 41. However, Shim, in view of Senshu and Nagai, fails to disclose where the disc information is repeatedly included in each data unit and where the processing step processes data included in each data unit to identify the disc information.

In the same field of endeavor, Ueda discloses where the processing step processes the read information included in each data unit to identify the information (figure 5).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the apparatus and disk of Shim, as modified by Senshu and Nagai, with those of Ueda, for the purpose of preventing illegal regional information reinitialization (¶ 58).

Double Patenting

13. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple

assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

14. Claims 1-4, 8, 13, 16-19, 24, 25, 36-42, 46-51, 53, 54, 56, 57, 59, and 60 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 5, 6, 41, and 42 of copending Application No. 10/787,159 in view of Senshu and Shim. Although not identical, the claimed methods and apparatuses of the instant application are rendered obvious over the claims of 10/787,159 because one skilled in the art would have known that the recording medium of 10/787,159 would inherently require a specific method/apparatus to record data on or reproduce data from said recording medium.

Regarding claims 1, 18, 38, 50, and 56, 10/787,159 claims a recording medium having a lead-in area and a BCA having 16 [bytes of] information data and 16 [bytes of] parity data (claim 1), yet does not claim the exact arrangement of this data or the exact content of the information data.

In the same field of endeavor, Senshu discloses the exact arrangement of this data, as shown in the preceding art rejection of claim 1.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the claimed invention of 10/787,159, for the same purpose as shown in the preceding rejection of art claim 1. However, Senshu also fails to disclose the exact content of the information data.

In the same field of endeavor, Shim discloses the exact content of the information data as shown in the preceding art rejection of claim 1.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the combined recording medium/apparatuses/methods of the claims of 10/787,159 in view of Senshu with the disclosed medium/apparatus/method of Shim, for the purpose of quickly and accurately discriminating type of optical disk placed in an optical disk player (¶ 15).

Regarding claims 2-4, 8, 13, 16, 19, 24, 25, 36, 37, 39-41, 46-49, 51, 53, 54, 57, 59, and 60, 10/787,159 does not claim the details of these claims.

In the same field of endeavor, Senshu and Shim disclose these details, as applied above.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the combined recording medium/apparatuses/methods of the claims of 10/787,159 in view of Senshu with the disclosed medium/apparatus/method of Shim, for the purpose of quickly and accurately discriminating type of optical disk placed in an optical disk player (¶ 15).

Regarding claim 17, 10/787,159, in view of Senshu and Shim, claims everything, as applied to claims 1 and 16. Additionally, 10/787,159 claims where the information is in the first byte of each data unit (suggested by claim 41).

Regarding claim 42, 10/787,159, in view of Senshu and Shim, claims everything, as applied to claims 38, 40, and 41. Additionally, 10/787,159 claims the repeated storage of data in each data unit (claim 5) and the processing to identify the information (inherent in claims 1 and 5 because one skilled in the art would have known that the recording medium of 10/787,159 would inherently require a specific method/apparatus to process reproduced information in order to record data on or reproduce data from said recording medium).

15. Claim 7 is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 5, 6, 41, and 42 of copending Application No. 10/787,159 in view of Senshu, Shim, and Dieleman.

Regarding claim 7, 10/787,159 does not claim the details of this claim.

In the same field of endeavor, the disclosures of Senshu, Shim, and Dieleman make up for deficiencies of the claims of 10/787,159.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the claimed invention of 10/787,159 with the disclosed inventions of Senshu, Shim, and Dieleman, for the same purpose(s) as shown in the preceding art rejection of claim 7.

16. Claims 9, 12, 35, and 45 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 5, 6, 41, and 42 of copending Application No. 10/787,159 in view of Senshu, Shim, and the AAPA.

Regarding claims 9, 12, 35, and 45, 10/787,159 does not claim the details of these claims.

In the same field of endeavor, the disclosures of Senshu, Shim, and the AAPA make up for deficiencies of the claims of 10/787,159.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the claimed invention of 10/787,159 with the disclosed inventions of Senshu, Shim, and the AAPA, for the same purpose(s) as shown in the preceding art rejection of claims 9, 12, 35, and 45.

17. Claims 10, 52, and 58 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 5, 6, 41, and 42 of copending Application No. 10/787,159 in view of Senshu, Shim, and Xie.

Regarding claims 10, 52, and 58, 10/787,159 does not claim the details of these claims.

In the same field of endeavor, the disclosures of Senshu, Shim, and Xie make up for deficiencies of the claims of 10/787,159.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the claimed invention of 10/787,159 with the disclosed inventions of Senshu, Shim, and Xie, for the same purpose(s) as shown in the preceding art rejection of claims 10, 52, and 58.

18. Claims 14, 23, 44, 55, and 61 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 5, 6, 41, and 42 of copending Application No. 10/787,159 in view of Senshu, Shim, and Haneji.

Regarding claims 14, 23, 44, 55, and 61, 10/787,159 does not claim the details of these claims.

In the same field of endeavor, the disclosures of Senshu, Shim, and Haneji make up for deficiencies of the claims of 10/787,159.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the claimed invention of 10/787,159 with the disclosed inventions of Senshu, Shim, and Haneji, for the same purpose(s) as shown in the preceding art rejection of claims 14, 23, 44, 55, and 61.

19. Claims 15, 22, and 43 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 5, 6, 41, and 42 of copending Application No. 10/787,159 in view of Senshu, Shim, and Vining.

Regarding claims 15, 22, and 43, 10/787,159 does not claim the details of these claims.

In the same field of endeavor, the disclosures of Senshu, Shim, and Vining make up for deficiencies of the claims of 10/787,159.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the claimed invention of 10/787,159 with the disclosed inventions of Senshu, Shim, and Vining, for the same purpose(s) as shown in the preceding art rejection of claims 15, 22, and 43.

These are provisional obviousness-type double patenting rejections.

Response to Arguments

20. Applicant's arguments with respect to claims 1, 18, 38, 50, and 56 have been considered but are moot in view of the new ground(s) of rejection.

Closing Remarks/Comments

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan Danielsen whose telephone number is (571)272-4248. The examiner can normally be reached on Monday-Friday, 9:00 AM - 5:00 PM Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, A.L. Wellington can be reached on (571) 272-4483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Andrea L Wellington/
Supervisory Patent Examiner, Art Unit 2627

/ND/
05/28/2009